

# ABB BALDOR RELIANCE III

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## Customer information packet

### CEWDM4338T

30HP, 890RPM, 3PH, 60HZ, 364TC, TEFC, F1

Class - None

Division - Not Applicable

**Specifications**

|                               |                                          |
|-------------------------------|------------------------------------------|
| Enclosure                     | TEFC                                     |
| Frame                         | 364TC                                    |
| Frame Material                | Iron                                     |
| Frequency                     | 60.00 Hz                                 |
| Haz Area Class and Group      | None                                     |
| Haz Area Division             | Not Applicable                           |
| Motor Letter Type             | Three Phase                              |
| Output @ Frequency            | 30.000 HP @ 60 HZ                        |
| Phase                         | 3                                        |
| Synchronous Speed @ Frequency | 900 RPM @ 60 HZ                          |
| Voltage @ Frequency           | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ       |
| Agency Approvals              | CSA EEV<br>CCSA US                       |
| Ambient Temperature           | 40 °C                                    |
| Auxiliary Box                 | NO AUXILLARY BOX                         |
| Base Indicator                | Rigid                                    |
| Bearing Grease Type           | Polyrex EM (-20F +300F)                  |
| Current @ Voltage             | 80.000 A @ 230.0 V<br>40.000 A @ 460.0 V |
| Design Code                   | B                                        |
| Drip Cover                    | No Drip Cover                            |
| Duty Rating                   | CONT                                     |
| Efficiency @ 100% Load        | 91.7 %                                   |
| Enclosure Modification        | Severe Duty Features                     |
| Feedback Device               | NO FEEDBACK                              |
| Heater Indicator              | No Heater                                |
| High Voltage Full Load Amps   | 40.0 a                                   |
| Insulation Class              | F                                        |
| Inverter Code                 | Inverter Ready                           |
| IP Rating                     | IP55                                     |
| KVA Code                      | G                                        |

**Part Detail**

|              |            |
|--------------|------------|
| Revision     | A          |
| Type         | AC         |
| Mech. spec.  |            |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | A36WG0229  |
| Layout       | 617428-348 |
| Eff. date    | 09-10-2021 |
| CD Diagram   | 416820-002 |
| Poles        | 08         |
| Leads        | 3#6,6#8    |
| Proprietary  | False      |
| Created date | 08-22-2019 |

| Lifting Lugs                  | Standard Lifting Lugs |
|-------------------------------|-----------------------|
| Motor Lead Quantity/Wire Size | 3 @ 6 AWG             |
| Motor Standards               | NEMA                  |
| Motor Type                    | A36050M               |
| Mounting Arrangement          | F1                    |
| Number of Poles               | 8                     |
| Overall Length                | 33.48 IN              |
| Power Factor                  | 76                    |
| Product Family                | Washdown Features     |
| Pulley End Bearing Type       | Ball                  |
| Pulley Face Code              | C-Face                |
| Service Factor                | 1.15                  |
| Shaft Diameter                | 2.374 IN              |
| Shaft Ground Indicator        | No Shaft Grounding    |
| Shaft Rotation                | Reversible            |
| Shaft Slinger Indicator       | Shaft Slinger         |
| Speed                         | 890 rpm               |
| Speed Code                    | Single Speed          |
| Starting Method               | Direct on line        |
| Thermal Device - Bearing      | None                  |
| Thermal Device - Winding      | None                  |

**Nameplate**

|                  |  |
|------------------|--|
| NP2496L          |  |
| MOBIL POLYREX EM |  |

**NP2428L**

|                   |                                |       |         |              |            |                         |                     |    |                       |       |       |  |
|-------------------|--------------------------------|-------|---------|--------------|------------|-------------------------|---------------------|----|-----------------------|-------|-------|--|
| SPEC NO.          | A36-7775-0229                  |       |         | CAT.NO.      | CEWDM4338T |                         |                     |    |                       | FRAME | 364TC |  |
| HP                | 30                             | VOLTS | 230/460 |              | PHASE      | 3                       | DESIGN              | B  | TYPE                  | P     |       |  |
| RPM               | 890                            | AMPS  | 80/40   |              | HZ         | 60                      | AMB                 | 40 | SF                    | 1.15  |       |  |
| DRIVE END BEARING | 65BC03JGG30A                   |       |         | DUTY         | CONT       | INSUL.CLASS             |                     | F  |                       |       |       |  |
| OPP D.E. BEARING  | 65BC03JGG30A                   |       |         | ENCL         | TEFC       | CODE                    | G                   |    |                       |       |       |  |
| SER.NO.           |                                |       |         | POWER FACTOR |            | 76                      | NEMA-NOM-EFFICIENCY |    |                       |       | 91.7  |  |
|                   |                                |       |         |              |            | MAX CORR KVAR           |                     | 10 | GUARANTEED EFFICIENCY |       | 90.2  |  |
|                   | IP55                           |       |         |              |            | NEMA NOM/CSA QUOTED EFF |                     |    |                       |       |       |  |
|                   | 10:1CT AND 10:1VT ON VPWM INVE |       |         |              |            | RTER, 1.00SF            |                     |    | MOTOR WEIGHT          |       |       |  |

|                                                                                                                                                                                                                |              |                   |                       |                                              |                 |         |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------------------|-----------------------|----------------------------------------------|-----------------|---------|--|--|
| REL.<br>S.O.                                                                                                                                                                                                   | FRAME        | HP                | TYPE                  | PHASE/<br>HERTZ                              | RPM             | VOLTS   |  |  |
|                                                                                                                                                                                                                | 364TC        | 30                | P                     | 3/60                                         | 890             | 230/460 |  |  |
| AMPS                                                                                                                                                                                                           | DUTY         | AMB °C/<br>INSUL. | S.F.                  | NEMA<br>DESIGN                               | CODE<br>LETTER  | ENCL.   |  |  |
| 80/40                                                                                                                                                                                                          | CONT         | 40/F              | 1.15                  | B                                            | G               | TEFC    |  |  |
| E/S                                                                                                                                                                                                            | ROTOR        | TEST<br>S.O.      | TEST<br>DATE          | STATOR RES. @25 °C<br>OHMS (BETWEEN LINES)   |                 |         |  |  |
| 591745                                                                                                                                                                                                         | 418141-73-AE | ---               | ---                   | .0676/.270                                   |                 |         |  |  |
| PERFORMANCE                                                                                                                                                                                                    |              |                   |                       |                                              |                 |         |  |  |
| LOAD                                                                                                                                                                                                           | HP           | AMPERES           | RPM                   | %<br>POWER FACTOR                            | %<br>EFFICIENCY |         |  |  |
| NO LOAD                                                                                                                                                                                                        | 0            | 19.7              | 900                   | 4.97                                         | 0               |         |  |  |
| 1/4                                                                                                                                                                                                            | 7.52         | 21.6              | 897                   | 37.5                                         | 86.9            |         |  |  |
| 2/4                                                                                                                                                                                                            | 15.0         | 26.0              | 895                   | 59.1                                         | 91.5            |         |  |  |
| 3/4                                                                                                                                                                                                            | 22.5         | 32.4              | 892                   | 70.3                                         | 92.4            |         |  |  |
| 4/4                                                                                                                                                                                                            | 30.0         | 40.0              | 889                   | 76.2                                         | 92.2            |         |  |  |
| 5/4                                                                                                                                                                                                            | 37.5         | 48.7              | 885                   | 78.8                                         | 91.5            |         |  |  |
|                                                                                                                                                                                                                |              |                   |                       |                                              |                 |         |  |  |
| SPEED TORQUE                                                                                                                                                                                                   |              |                   |                       |                                              |                 |         |  |  |
|                                                                                                                                                                                                                |              | RPM               | TORQUE<br>% FULL LOAD | TORQUE<br>LB.-FT.                            | AMPERES         |         |  |  |
| LOCKED ROTOR                                                                                                                                                                                                   |              | 0                 | 137                   | 242                                          | 212             |         |  |  |
| PULL UP                                                                                                                                                                                                        |              | 213               | 128                   | 227                                          | 200             |         |  |  |
| BREAKDOWN                                                                                                                                                                                                      |              | 844               | 228                   | 405                                          | 119             |         |  |  |
| FULL LOAD                                                                                                                                                                                                      |              | 889               | 100                   | 177                                          | 40.0            |         |  |  |
| AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE<br>AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE<br><br>REMARKS: TYPICAL DATA<br>XE MOTOR - NEMA NOM. EFF. 91.7 % |              |                   |                       |                                              |                 |         |  |  |
|                                                                                                                             |              | DR. BY            | E. J. CHRISTIAN       | <b>A-C MOTOR<br/>PERFORMANCE DATA</b>        |                 |         |  |  |
|                                                                                                                                                                                                                |              | CK. BY            | E. J. CHRISTIAN       |                                              |                 |         |  |  |
|                                                                                                                                                                                                                |              | APP. BY           | J. P. TSAO            |                                              |                 |         |  |  |
|                                                                                                                                                                                                                |              | DATE              | 04/07/15              |                                              |                 |         |  |  |
|                                                                                                                                                                                                                |              |                   |                       | <b>A36WG0229-R004</b><br>ISSUE DATE 08/22/19 |                 |         |  |  |

REL S.O.

 RPM **890**

 S.F. **1.15**

 ROTOR **418141-73-AE**

 FRAME **364TC**

 VOLTS **230/460**

 NEMA DESIGN **B**

 TEST S.O. **TYPICAL DATA**

 HP **30**

 AMPS **80/40**

 CODE LETTER **G**

 TEST DATE **---**

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

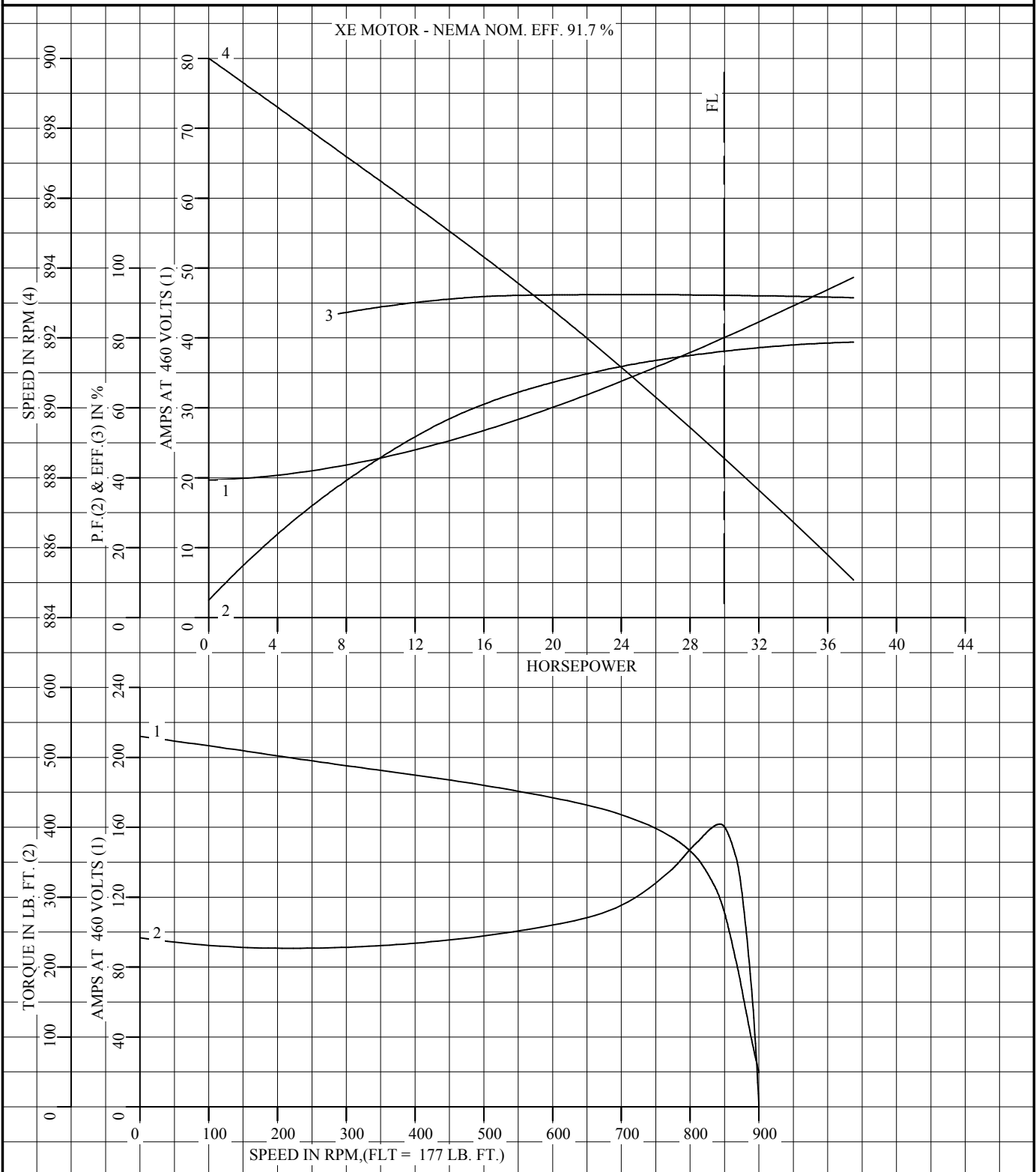
 STATOR RES. @ 25 °C **.0676/.270**

 PHASE/HERTZ **3/60**

 AMB °C/INSUL **40/F**

 E/S **591745**

OHMS (BETWEEN LINES)



AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

**BALDOR**  
A MEMBER OF THE ABB GROUP

DR. BY E.J. CHRISTIAN  
CK. BY E.J. CHRISTIAN  
APP. BY J.P. TSAO  
DATE 04/07/15

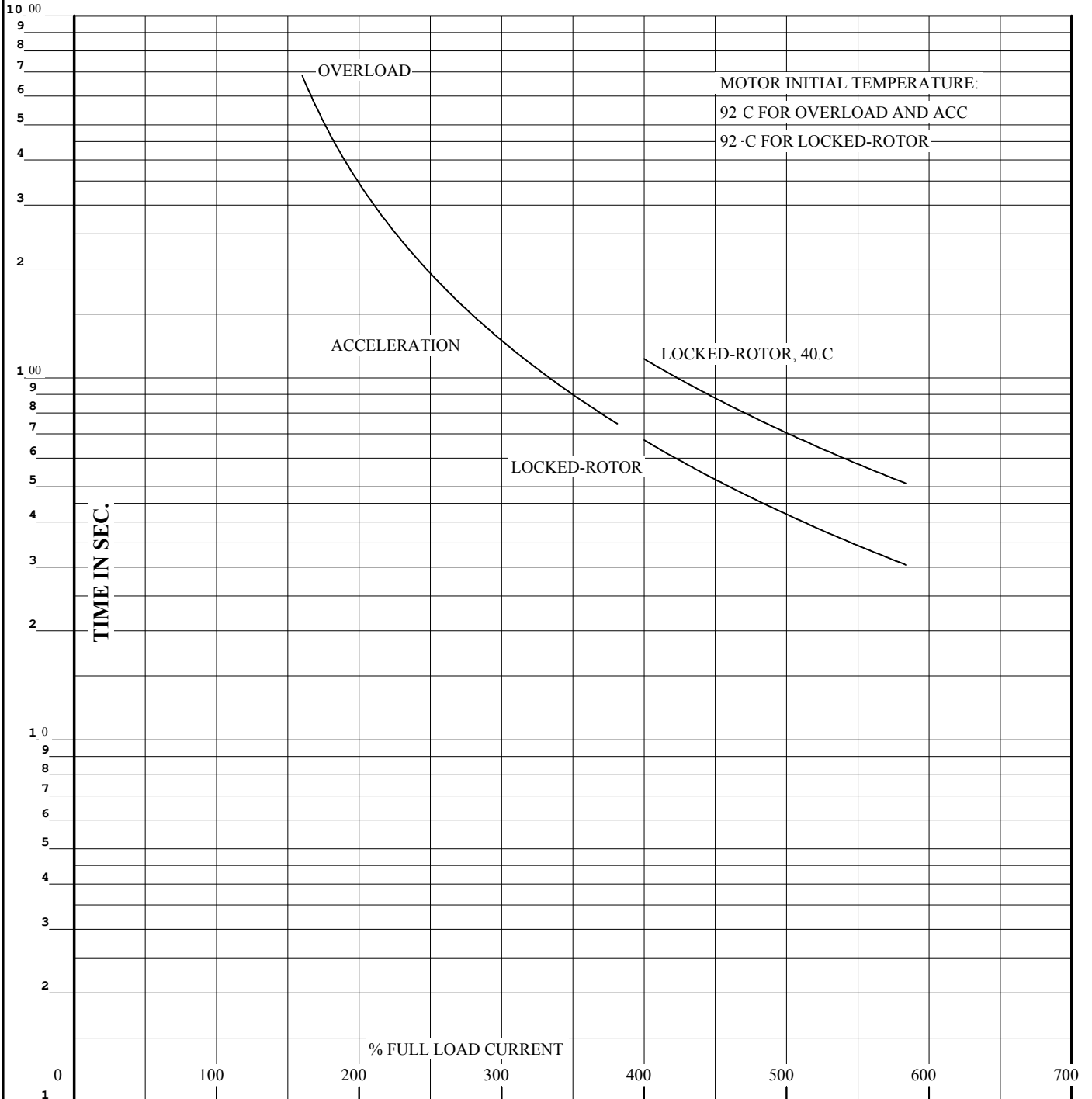
**A-C MOTOR  
PERFORMANCE  
CURVES**

A36WG0229-R004

ISSUE DATE 08/22/19

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|                         |                          |                       |                                       |
|-------------------------|--------------------------|-----------------------|---------------------------------------|
| REL. S.O.               | RPM <b>890</b>           | S.F. <b>1.15</b>      | ROTOR <b>418141-73-AE</b>             |
| FRAME <b>364TC</b>      | VOLTS <b>230/460</b>     | NEMA DESIGN <b>B</b>  | TEST S.O. <b>TYPICAL DATA</b>         |
| HP <b>30</b>            | AMPS <b>80/40</b>        | CODE LETTER <b>G</b>  | TEST DATE <b>---</b>                  |
| TYPE <b>P</b>           | DUTY <b>CONT</b>         | ENCLOSURE <b>TEFC</b> | STATOR RES. @ 25 °C <b>.0676/.270</b> |
| PHASE/HERTZ <b>3/60</b> | AMB °C/INSUL <b>40/F</b> | E/S <b>591745</b>     | OHMS (BETWEEN LINES)                  |



THERMAL LIMIT CURVE

REMARKS: XE MOTOR - NEMA NOM. EFF. 91.7 %

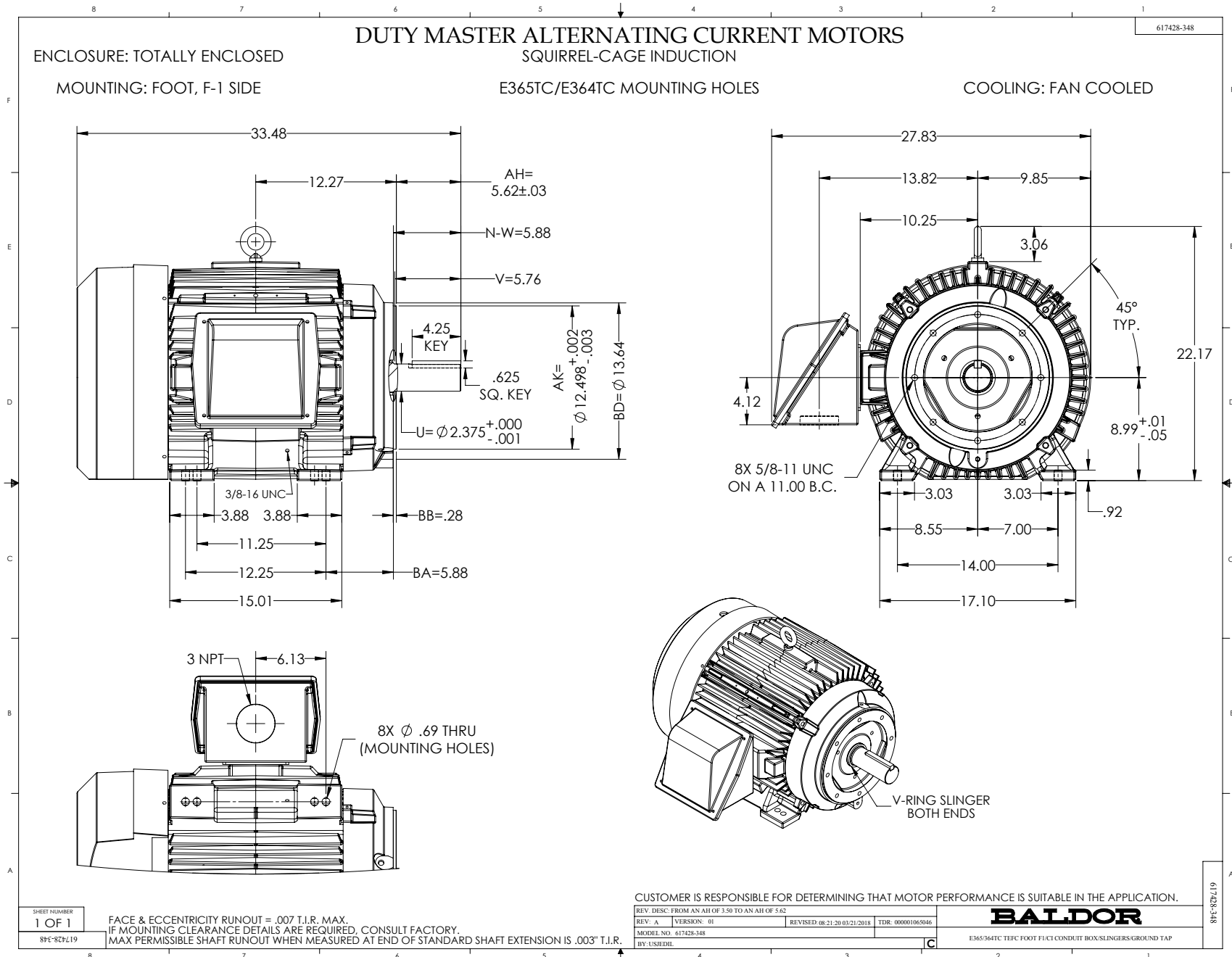
AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.



|         |                |
|---------|----------------|
| DR. BY  | E.J. CHRISTIAN |
| CK. BY  | E.J. CHRISTIAN |
| APP. BY | J.P. TSAO      |
| DATE    | 04/07/15       |

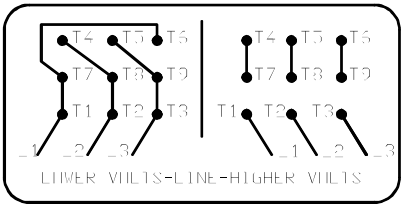
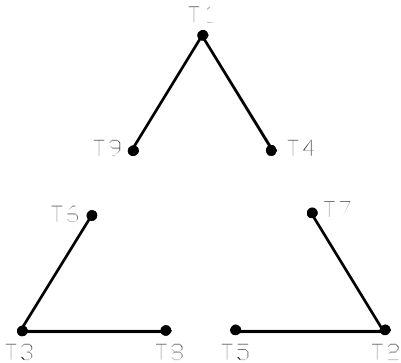
**A-C MOTOR  
PERFORMANCE  
CURVES**

**A36WG0229-R004**  
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416820-002

A-C MOTOR  
CONNECTION DIAGRAM  
STANDARD 9 LEAD    DELTA-CONNECTED



(N.P. 1575-B)

|                                           |                              |                   |
|-------------------------------------------|------------------------------|-------------------|
| REV. DESC: FONT CHANGE FOR PDF SEARCHABLE |                              |                   |
| REV. LTR: A                               | VERSION: 01                  | TDR: 000001009382 |
| FILE: \MGA\00000\661                      | REVISED: 02:46:19 02/13/2020 | BY: MGHMTT        |
| MTL: —                                    | ⊗ ◻                          |                   |

**BALDOR - RELIANCE®**

CONN DIAG — STANDARD 9 LEAD, DELTA-CONNECTED  
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